ALABAMA

PROCEDURE MANUAL

FOR

MANAGEMENT OF INITIAL OUTBREAK

OF

AVIAN INFLUENZA

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Avian Influenza Statutes

Alabama Legislative Act 1984, No. 84-283, p. 490 Laws of Alabama Related to Animal Industries 2-16-23

- a) The legislature has ascertained and found and hereby declares that the disease avian influenza is a serious transmissible disease of all birds, for which there is no known cure, and that this diseases has been diagnosed in several states of the United States. Any outbreak of this disease in Alabama could seriously jeopardize the entire poultry industry in Alabama.
- b) Any person knowingly or wantonly violating any laws or regulations duly promulgated by the state board of agriculture and industries which was enacted for the prevention or eradication of the disease of avian influenza shall be guilty of a Class C felony.

AVIAN INFLUENZA (AI) FACTS

1) DEFINITION AND HISTORY

- a) Avian Influenza (AI) is a highly contagious viral disease of poultry.
 Waterfowl are infected carriers that shed the virus in feces but do not become sick.
- b) The historical names of AI are fowl plague or fowl pest.
- c) Five significant outbreaks in the U.S. have occurred: 1924-25 in New York, 1929 in New York, 1975 in Alabama, 1978 in Minnesota, and 1983 in Pennsylvania.
- d) Respiratory AI has been a continual problem in turkeys, mainly in Minnesota since 1970. Turkeys, quail and chickens were infected in Virginia and North Carolina in 2002. AI virus persists in live bird markets in some New England states.

2) CLINICAL SIGNS

- a) Clinical signs of Al vary with the virulence of the virus, age of birds and quality of the environment. The respiratory tract is usually involved.
- b) In mild cases, only a respiratory snick may be heard and young birds appear "sleepy". Slight egg production loss may occur.
- c) In more severe cases, depression, sinusitis, nervous disorders, accumulation of fluid under the skin of the face, wattles and legs and sudden deaths occur. In severe outbreaks, mortality can reach 70% in a week and egg production can drop 100%.

3) AI VIRUS

- a) Different levels of severity of the disease depend on the initial type of virus (H2, H5, H7, etc) and the number of times it passes through different flocks.
- b) The virus can, without warning, mutate to the most severe form called highly pathogenic AI (High Path AI, HPAI). The mild form of the disease is called Low Path AI. The different virus types must be determined in the laboratory.

4) TRANSMISSION

- a) All is started in many cases from waterfowl since they are asymptomatic carriers of influenza.
- b) Once the infection is established in chicken or turkey flocks, people, equipment, free-flying birds or material shared by different flocks are major sources of AI spread. Catching and live-haul equipment and people are highly suspect of carrying disease organisms from farm to farm.
- c) Direct egg transmission (inside the egg) is not significant but eggshell contamination (indirect egg transmission) is a possibility. Infected birds shed the virus for at least 21 days and periodically at later times.

5) PREVENTION

- a) All is prevented by keeping the virus away from chickens and turkeys so that they cannot become infected.
- b) This means away from the farm, away from the county, and away from Alabama. Everyone with access to or responsibility for live poultry has a role in preventing Al.
- c) Simple but effective biosecurity can protect flocks. A gate to block unauthorized entry to a farm and NO ADMITTANCE signs are effective but only if enforced.
- d) A complete security program covers people, pets and pests, vehicles, all supplies including feed, offal and manure.
- e) Waterfowl and wild birds are a risk to poultry flocks. All is carried by migrating waterfowl and the Alabama rivers are part of the North American migration flyways. Canada geese are now resident on many golf courses.

6) CURRENT STATUS AND SURVEILLANCE

- a) Chickens in Alabama are free of AI, supported and documented by surveillance that began in 1988.
- b) Surveillance for AI is done by serology and by virus isolation. For example, in 2001 50,000 blood tests representing about 5,000 flocks were completed for AI; all were negative. The procedure for common respiratory viruses (bronchitis, Newcastle) also tests for the AI virus.

THE ALABAMA AI RESPONSE PLAN

1) PURPOSE AND OBJECTIVE

a) To have emergency plans to control and/or eradicate AI, should it be diagnosed in Alabama. AI could result in serious economic losses to the commercial poultry industries in Alabama.

2) ACTION TO BE TAKEN BY GROWERS

- a) Identifying the cause of all respiratory diseases is the key to surveillance to AI. This requires submitting birds to a diagnostic laboratory whenever a respiratory disease occurs.
- b) If an outbreak of AI is suspected, the grower should immediately telephone the service representative responsible for the flock to notify him or her of this suspicion.
- c) DO NOT visit other poultry farms.
- d) DO NOT allow anyone except a designated company representative and/or a State or Federal regulatory veterinarian or authorized investigator to enter the chicken house. If in doubt, ask for identification and call the State Veterinarian (334-240-7253).
- e) DO NOT leave the farm without taking a bath or shower, and changing to clean, freshly laundered clothing.

3) ACTION BY STATE INVESTIGATOR AND SERVICE REPRESENTATIVE

- a) The service representative immediately gives the suspicious flock top priority and notifies the diagnostic laboratory and the State Veterinarian (334-240-7253).
- b) The State Veterinarian will dispatch an Animal Industries Veterinarian or an authorized investigator to accompany the service representative on the flock visit.
- c) The following equipment should be available as a kit for the flock visit.
 - i) Rubber boots or disposable footwear
 - ii) Coveralls

- iii) Disposable cap (surgical head covering)
- iv) Rubber or plastic disposable gloves
- v) Plastic garbage bags
- vi) Disinfectant
- vii) Brush
- viii)Bucket
- ix) Fly spray/aerosol insecticide
- x) Copy of Procedure Manual for Management of initial action of a suspected Emergency Poultry Disease
- xi) Quarantine signs (6)
- d) Park vehicle well away from poultry house, preferably in a well graveled or grassed area.
- e) Put on all protective wearing apparel, disinfect boots and gloves.
- f) If the suspicion of AI is confirmed, specimens should be collected for diagnosis by the following procedure.
 - i) Select live symptomatic or fresh dead birds. Birds selected for laboratory specimen (dead or alive) should be handled in such a manner as to minimize contamination from fecal matter or any other body exudates or feathers. Live birds should be killed humanely.
 - ii) Birds selected for laboratory specimens should be placed in plastic bags. To prevent tearing of plastic bag, cut off beak and feet of dead birds at hock prior to putting these birds in the plastic bag. Tie off plastic bag.
 - iii) Disinfect the plastic bag containing the birds and then place into a second plastic bag. Disinfect the second bag.
 - iv) Prior to leaving premises, remove protective clothing and footwear. Place these items in disinfectant and thoroughly disinfect.
- g) Be careful to avoid contamination of vehicle.
- h) All reusable protective clothing should be thoroughly disinfected and laundered. All disposable protective clothing should be thoroughly wetted with disinfectant, securely bagged and securely disposed of (incinerated or buried on the farm, or placed in dumpster with direct route to landfill).
- Animal Industries Veterinarian or authorized investigator will issue written quarantine of premises and post QUARANTINE signs. Service representative will support quarantine and notify company personnel of actions.

- j) Alert appropriate diagnostic laboratory and deliver specimens to laboratory immediately.
- k) Alabama State Diagnostic Laboratories are:

Auburn

1001 Wire Road (Across the street from Veterinary College) Auburn, AL 36830 (334) 844-4987

Boaz

501 Usury Ave. (Rear of Snead Jr. College campus) Boaz, AL 35967 (256) 593-2995

Hanceville

801 Main Street, NW (Rear of Wallace State College Campus) Hanceville, AL 35077-0409 (256) 352-8036

Elba

495 State Rd. 203 Elba, AL 36323 (334) 897-6340

- Wash and disinfect vehicle at the diagnostic laboratory; or proceed directly to nearest car wash and thoroughly clean vehicle, tires, and underside of vehicle.
- m) Service Representative will not visit other poultry farms that day.
- n) Service Representative will not have contact with poultry or poultry personnel until taking a bath or shower, and changing to clean, freshly laundered clothing.
- o) Service Representative will launder any clothing worn to suspect Al farm in hot water. Shoes should be thoroughly cleaned and disinfected.

4) ACTION OF DIAGNOSTIC LABORATORY

- a) Maintain clear communication with State Veterinarian (334-240-7253) throughout all phases of the laboratory investigation.
- b) Laboratory assigns top priority to specimens and makes presumptive and differential diagnosis as soon as possible.
- c) Specimen collection list
 - i) Virus isolation (Duplicate/split samples for Auburn and National Veterinary Services Laboratory)
 - (1) Minimum: trachea and cloacal swabs
 - (2) <u>Preferred</u>: trachea, lung, air sac, sinus exudates, intestine and cecal tonsils. Place specimens in Whirl-Pak bags. Respiratory tissues can be pooled. Gut tissues should be kept separate in bags containing like tissues.
 - ii) If possible: serum for agar gel immunodiffusion (AGID)testing.
- d) Ship overnight by UPS or FedEx to National Veterinary Services Laboratory. Ship by standard method to Auburn.

5) ACTION OF THE COMMISSIONER OF AGRICULTURE AND INDUSTRIES

- a) The Commissioner of Agriculture and Industries, with the approval of the State Board of Agriculture and Industries, is authorized by statute to:
 - i) Adopt, conduct and carryout a program or plan designed to prevent eradicate and control infectious and contagious diseases of poultry in the state of Alabama (2-16-21).
 - ii) To cooperate and enter into cooperative agreements with other agencies for the purpose of carrying out these activities (2-16-21).
 - iii) Invite cooperation of federal government in arrest or eradication of disease within the state. "Disease" is ".....contagious or infectious disease of cattle, sheep, swine, goats and poultry" (2-15-152).
- b) The Commissioner will appoint an Advisory Committee for the purpose of formulating recommendations to the State Veterinarian in handling the initial stages of an outbreak of AI. The Advisory Committee will be

appointed in consultation with the State Veterinarian and Head of the Animal Industries Division.

6) ACTION OF THE STATE VETERINARIAN

- a) The State Veterinarian shall exercise all the powers vested in the Commissioner of Agriculture and Industries in the administration and enforcement of the provisions of the state livestock sanitary laws and rules and regulations. (2-4-1).
- b) The State Veterinarian, or assistant veterinarian, or authorized inspector of the Department of Agriculture and Industries, is authorized to:
 - i) Enter any premises or building where poultry is kept for the purpose of inspection or duties necessary to enforce the control, eradication or prevention of the spread of contagious and infectious diseases of poultry (2-15-158).
 - ii) Issue written or printed notice of quarantine to animal owners or transportation agents (2-15-153).
 - iii) Enforce statutes to control, eradicate and prevent the spread of contagious and infectious diseases of poultry through the proper destruction and disposal of dead poultry, unhatched or unused eggs and other poultry waste (2-16-42).
- c) The State Veterinarian is authorized to supervise the disposition of condemned animals or materials (2-15-168)
- d) All public announcements of Al diagnostic findings, all media contacts, and all regulatory reports will be made by the State Veterinarian in conjunction with the Commissioner of Agriculture and Industries.

Actions to Prevent Spread of AI in an Outbreak

1) REQUIREMENTS OF QUARANTINE

- i) Assure that quarantine signs are posted at farm entrance and on poultry house doors.
- ii) Eliminate all service and other visits to quarantined farm, including supervisor, repair and maintenance personnel.
- iii) Fully inform grower of the problem and danger involved.
- iv) Specifically restrict movement of grower and family individuals and employees.
- v) Suspend feed deliveries until a specific program is outlined by Department of Agriculture and Industries.
- vi) Birds will be moved according to procedures outlined by Department of Agriculture and Industries (including dead birds).
- vii) Department of Agriculture and Industries will outline procedures for house(s) after removal of birds.
- viii)Placements will be withheld until suspect is diagnosed.

2) FEED DELIVERY

- a) Make delivery a last stop for unloading a mixed load.
- b) Driver must not enter poultry house.
- c) Driver must wear protective footwear.
- d) Keep truck doors closed during unloading operation to keep flies and other insects out. Spray house-hold aerosol insect killer in cab before leaving farm.
- e) Disinfect protective footwear and properly discard disposable footwear when leaving farm.

- f) Spray disinfectant inside truck cab.
- g) Truck must be driven through truck wash before delivering feed to another farm.

3) GROWER AND FAMILY RESTRICTIONS

- a) Limit flock management to specific individuals.
- b) Fully inform these individuals on procedures for clothing, disinfection, dead bird disposal and limitations on their off-farm visiting.
- No other farm can be visited and should not come in contact with other growers.
- d) Family members who work off the farm must not enter poultry house.
- e) Family members who work off the farm must not have contact with any other poultry.

4) BASIC REQUIREMENTS FOR MOVEMENT INTO AND OUT OF AI QUARANTINE AREA (QA)

- a) Two types of Movement
 - i) Prohibited not permitted out of QA
 - ii) Restricted only permitted out of QA after having met certain requirements.
- b) Live Birds from QA
 - i) Infected or exposed birds
 - (1) Will not move from farm.
 - (2) Will be depopulated.
 - (3) Will be disposed of by:
 - (a) Burial on-site
 - (b) Incineration on-site

- (c) Composted on-site
- (d) Removed from premises in a leak proof container or freezer to an approved landfill or renderer.

ii) Uninfected birds

- (1) Broilers will be issued permit to go directly to slaughter, provided:
 - (a) The flock passes ante mortem health inspection by authorized inspector during the last week of growout, and
 - (b) 30 birds have tested negative for AI by the agar gel immunodiffusion (AGID) test, or
 - (c) Tracheal and cloacal swabs from 10 cull birds have tested negative by virus isolation or approved virus detection test.
- (2) Leghorn pullets or broiler breeder pullets and males will be issued permit to move to layer house or breeder house inside or outside of the quarantine area, provided:
 - (a) The flock passes health inspection by authorized inspector during the last week before movement, <u>and</u>
 - (b) 30 birds have tested negative for AI the agar gel immunodiffusion (AGID) test, and
 - (c) Tracheal and cloacal swabs from 10 cull birds have tested negative by virus isolation or approved virus detection test.
- (3) Game birds such as quail and pheasants, and noncommercial poultry will be issued permit to move from premises to outside of the quarantine area, provided:
 - (a) The flock passes health inspection by authorized inspector during the last week before movement, <u>and</u>
 - (b) 100% or not less than 30 birds have tested negative for AI the agar gel immunodiffusion (AGID) test, and
 - (c) Tracheal and cloacal swabs from 10 cull birds have tested negative by virus isolation or approved virus detection test.
- (4) Trucks and live haul equipment are cleaned and disinfected at processing plant or farm of layer or breeder placement.

(5) No live birds can move in the QA without inspection and permit as described above.

c) Eggs from QA

- i) Table eggs from infected flocks.
 - (1) Eggs from infected flocks will not be used in any way.
 - (2) Allowed out of QA by only permit to be buried or burned.
- ii) Table eggs from uninfected flocks (Showing no signs of disease—no unusual drop in egg production)
 - (1) Can only be shipped with permit.
 - (2) Eggs must be free of litter and fecal material and otherwise physically clean.
 - (3) Then, must be washed and sanitized with chlorine.
 - (4) Only leave QA in new or disinfected flats and cases.
- iii) Hatching eggs meat-type birds
 - (1) All flocks must be inspected.
 - (2) Flocks must be serologically negative for AI prior to eggs being shipped (30 birds tested).
 - (3) The eggs must physically clean and either be fumigated <u>or</u> thoroughly sprayed and wetted in the flats with an approved viricidal disinfectant.
 - (4) Only leave QA in new or disinfected flats and cases.
- d) Broiler, broiler breeder, or layer chicks
 - i) Chicks from hatchery in QA may go out of QA to an approved grower operation (no multiple age operations will be approved to receive chicks).
 - ii) Chicks are sent by permit only and then are placed under quarantine.

- iii) When ready to move, they will follow provisions as set up for all uninfected poultry moving out of QA, as appropriate for broilers, layers, or breeders, respectively.
 - (1) Visual inspection
 - (2) Blood test and/or virus test as specified
 - (3) To slaughter or farm placement only
 - (4) Transport vehicles cleaned and disinfected

e) Poultry Carcasses

- i) After passing the above criteria, there are no restrictions placed on processed poultry carcasses that have come from QA.
- f) Vehicles and mobile equipment
 - All vehicles and mobile equipment will be allowed into QA only by passing through designated checkpoint and with approval of authorized inspector.
 - ii) Any vehicle or piece of equipment associated with poultry production, game bird, or noncommercial poultry, or is assigned to a business or utilities sector that services poultry farms or facilities must be cleaned and disinfected and adhere to strict biosecurity at all times and prior to leaving any premise in a Quarantine Area.
 - iii) Feed trucks and regulation of feed deliveries into and out of QA.
 - (1) This area is not specifically covered in QA regulations, however, poultry companies must take it on themselves to have trucks cleaned and disinfected after each delivery in the QA.
 - iv) Other service vehicles such as chick busses, egg trucks, and live haul trucks and personnel must be cleaned with detergent and special emphasis on complete removal of feces, feathers, and dust, and destruction of insects, followed by thorough disinfection to break the transmission of Al virus.

5) BASIC REQUIREMENTS FOR MOVEMENT OF POULTRY INTO ALABAMA FROM A STATE WITH AN AI QUARANTINE AREA (QA)

- a) Movement of commercial poultry into Alabama from another state with an Al QA will be reviewed and approved by the Alabama State Veterinarian on a case-by-case basis. The following guidelines will be taken into consideration.
 - i) Out-of-State Quarantine Area (QA)
 - (1) A QA declared by another state shall be respected by the Alabama State Veterinarian.
 - (2) In the event another state has AI activity but has not declared a QA, the Alabama State Veterinarian shall define an area in that state as a QA for the purposes permitting movement of poultry into Alabama. The QA may include any part or all of the other state.
 - ii) Movement of poultry, eggs, and chicks into Alabama from <u>outside</u> a QA in a state with Al.
 - (1) At the discretion of the State Veterinarian, permits may be required for poultry, chicks, and eggs that are routinely moved across state lines. The State Veterinarian may require any or all of the tests listed in section 5.a.iii.2 before issuing a permit.
 - (2) The region of the state with the QA and the proximity to the origination point of the poultry, eggs, or chicks will be considered in the decision to approve movement into Alabama.
 - (3) Production complexes that have operations across state lines will be given due consideration to avoid disruptions, however, the protection of the greater Alabama poultry industry will be of primary importance.
 - iii) Movement of poultry, eggs and chicks into Alabama from inside a QA in a state with Al.
 - (1) Shall require a permit issued by the Alabama State Veterinarian.
 - (2) The Alabama State Veterinarian shall assess the risk of the particular situation, and may require any or all of the following tests before issuing a permit.

- (a) The flock passed health inspection by authorized inspector within seven days of movement.
- (b) 30 birds have tested negative for AI the agar gel immunodiffusion (AGID) test within two weeks of movement.
- (c) Tracheal and cloacal swabs from 10 cull birds have tested negative by virus isolation or approved virus detection test.
- iv) All criteria for commercial poultry above will be similarly applied to approval of movement of out-of-state game birds and noncommercial poultry into Alabama.